## DIGITAL RECORDING AND PLAYBACK SYSTEM WITH VOICE RECOGNITION CAPABILITY FOR CONCURRENT TEXT GENERATION

## 5 ABSTRACT OF THE INVENTION

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A digital recording and playback system with built-in voice recognition capability for concurrent text generation. In one embodiment, the system comprises an audio capturing device configured to receive a voice input. The system also comprises a high compression encoder (HCE) coupled to the audio capturing device and configured to generate digital wave data corresponding to the voice input, as well as a voice recognition engine (VRE) coupled to the audio capturing device and configured to generate text data corresponding to the voice input. In this embodiment, the HCE and VRE are selectively coupled to a memory sub-system which is configured to store the digital wave data and the text data. In this embodiment, the VRE performs voice-to-text conversion using the high quality audio input signal rather than highly compressed voice data so that high quality conversion is achieved. In this embodiment, the HCE and the VRE are operable to concurrently generate the digital wave data and the text data in response to the voice input such that the digital wave data and the text data can be stored in the memory sub-system in a synchronized manner. As such, this embodiment of the present invention provides recording capability wherein text data is generated from a voice input without requiring post-recording conversion. In a specific embodiment, the present invention includes the above and wherein the system is battery-powered and is portable.

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